IN THE DRAWINGS

Please add new Figs. 7B-7D attached to the enclosed letter to the draftsman. Please also approve the proposed changes to Figs. 1 and 4, the renumbering of Fig. 7 as Fig. 7A, and the proposed minor change to renumbered Fig. 7A as shown in red in the attachments to the enclosed letter to the draftsman.

IN THE SPECIFICATION

Please amend page 4, lines 7-8 of the specification to read as follows:

--Fig. 7A is yet another embodiment of the present invention wherein the a1 radiation source is embodied in microspheres distributed within the catheter.--

Please insert the following text after page 4, line 8 of the specification:

--Fig. 7B is a cross-sectional view of one embodiment of a microsphere containing radioactive material in accordance with the present invention.

Fig. 7C is a cross-sectional view of a second embodiment of a microsphere containing radioactive material in accordance with the present a2 invention.

Fig. 7D is a cross-sectional view of a third embodiment of a microsphere containing radioactive material in accordance with the present invention.--

Please amend page 8, lines 22-28 of the specification to read as follows:

--Fig. 4 shows an alternative configuration for the catheter 40 in accordance with the present invention. In this configuration, catheter 40 includes a carrier 37 having a sufficiently small diameter that it can be inserted within the catheter 40. Carrier 37 is preferably sufficiently rigid to promote the insertion and a3 removal of catheter 40 from the body in a conventional manner for such catheters. In this regard, carrier 37 may include stiffening elements, not shown, at various locations along its length in order to provide the requisite stiffness.--

Please amend page 10, lines 14-34 of the specification to read as follows:

--Fig. 7A depicts a still further embodiment of the present invention similar to that shown in Fig. 1 except that instead of pellets or seeds of radioactive source materials the embodiment of Fig. 7A employs microspheres 62 which embody the radioactive source 61. As with the catheter embodiments described above, the radioactive source 61 may be bonded to the outer surface of microspheres 62, as shown in Fig. 7B, or, in the case of hollow microspheres 62, the radiation source 61 may be bonded to the inner surface of the hollow microspheres 62, as shown in Fig. 7C. Alternatively, the radioactive source 61 may be dispersed within the material of each microsphere 62 as shown in Fig. 7D, particularly if the microspheres 62 are made from a polymer matrix material.

Microspheres 62 are preferably distributed in catheter 64 in some form of flexible substrate material such as an elastomer, gel, hydrogen, foam or other similar, suitable material 66 to prevent microspheres 62 from migrating from a desired location within the catheter 64, while at the same time maintaining the catheter 64 sufficiently flexible for use. Preferably, the elastomer, gel, hydrogel, foam or other similar material 66 serves to retain microspheres 62 within catheter 64 in a substantially uniform distribution to thereby provide a substantially uniform radiation dose over the entire treatment zone. The radiation source 62 is preferably separated from the remainder of catheter 64 by a spacer 65. Optionally, the catheter 64 of Fig. 7A may be provided with a removable plug 63 at the distal end thereof to provide access to the area where the radioactive source 61 is housed.--

a4

IN THE CLAIMS

Please cancel claims 19 and 32 without prejudice to resubmission.

Please amend claims 11-12, 15, 21, 31 and 33-35 to read as follows:

11. (Amended) A catheter as claimed in claim 7, further comprising a retractable sheath which comprises a radiation shielding material, said retractable sheath being positionable in a first, shielding position, wherein the sheath encloses the portion of the catheter body in which the radioactive source is housed, and a second, retracted position which exposes the

a5